# OCCUPATIONAL INJURIES AND DISEASES IN ALBERTA



Lost-Time Claims, Disabling Injury
Claims and Claim Rates

Alberta Motor Transport Association Industries

2004 to 2008

Summer 2009



Government of Alberta ■

Employment and Immigration



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## HIGHLIGHTS

#### Lower lost-time and disabling injury rates in 2008.

- In 2008, the Alberta Motor Transport Association (AMTA) industries lost-time claim rate decreased by 4.9% to 3.82 per 100 person-years worked, from 4.02 in 2007. The average lost-time claim rate for all sectors in the province was 1.88 per 100 personyears worked.
- In 2008, the AMTA industries had a duration rate of 116 days, an 11.8% decrease from the 2007 rate of 131. This duration rate is higher than the provincial rate of 41 days lost per 100 person-years worked.
- The disabling injury rate decreased by 3.7%, from 5.70 per 100 person-years worked in 2007 to 5.49 in 2008. The average disabling injury rate for all sectors in the province was 3.63 per 100 person-years worked.
- The decreases in the lost-time claim and disabling injury rates in 2008 were the result
  of a decrease in the number of lost-time and injury claims. Lost-time claims decreased
  by 4.6% and disabling injury claims by 3.3%.
- The 2008 fatality rate was 276 per million person-years worked, a decrease of 26.7% from 2007 of 376 per million person-years worked. The average fatality rate for all sectors in the province in 2008 was 99 per million person-years worked.

# Large size employers experienced the highest injury rates.

- Employers with 100 or more person-years worked had the highest lost-time claim rate in 2008, at 4.88 per 100 person-years worked.
- Employers with 100 or more person-years worked had the highest disabling injury rate at 8.56 per 100 person-years worked, followed by employers with 40 to 99 person-years worked, 5.77 per 100 person-years worked.
- Employers with more than 100 person-years worked had a disabling injury rate almost double their lost-time claim rate. Lost-time claim rates and injury rates in the AMTA industries increase with the size of the employer.

# Injury rates decreased in most sectors.

- Lost-time claim rates decreased in all AMTA industries, except for the Garbage Collection and Disposal Services sub-sector, which showed an increase in its disabling injury rate in the year 2008.
- The Specialized Trucking sub-sector had the lowest lost-time claim rate at 2.23 per 100 person-years worked. The Garbage Collection and Disposal Services sub-sector had the

highest at 4.39 per 100 person-years worked.

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- The Specialized Trucking sub-sector had the lowest disabling injury rate at 4.39 per 100
  person-years worked. The Garbage Collection and Disposal Services sub-sector had the
  highest at 8.74 per 100 person-years worked.
- The AMTA industries accounted for 3.0% of the person-years worked in the province,
   6.2% of the lost-time claims, and 4.1% of modified work claims and when combined,
   4.6% of the disabling injury claims.

# In 2008, sprains, strains and tears was the most common nature of injury.

- Sprains, strains and tears continued to be the leading nature of injury, accounting for 52.5% of the disabling injury claims submitted in the AMTA industries. Disabling injury claims connected with fractures and dislocations and other traumatic injuries and disorders, however, had proportions 2.0 and 1.7 times higher than the average for all sectors, indicating a higher likelihood of this type of injury occurring.
- The back (including spine and spinal cord) was the most commonly injured body part, accounting for 24.5% of all disabling injury claims. Lost-time claims connected with multiple body parts and other trunk displayed proportions that were 2.8 and 2.7 times the average for all sectors.
- The primary sources of injury causing disabling injury claims were structures and surfaces, accounting for 20.5% of the disabling injury claims, followed by vehicles, 19.1%. Compared to the average for all sectors in the province, vehicles, containers and structures and surfaces displayed proportions that were 4.0, 2.2 and 1.9 times higher than the average for all sectors.
- In 2008, the most common type of event or exposure was bodily reaction or exertion which accounted for 38.2% of lost-time claims and 39.9% of disabling injury claims. Disabling injury claims caused by transportation accidents however had a proportion that was 4.1 times the average for all sectors. Falls to a lower level and falls on the same level had proportions for disabling injury claims that were 2.7 and 1.8 times higher in the AMTA industries than the average for all sectors in the province.
- The median work days lost in the AMTA industries was ten, compared to the average for all sectors of the province, seven. The average days lost per claim was 30, compared to the average for all sectors in the province, 22 days lost per claim.

#### A few notes about this report:

- This report presents 2008 data beside 2007 data to help with comparisons. Additional historical data are presented where possible.
- Information presented in this report is based on incidents that occurred during 2008 and were accepted as lost-time or modified work claims by Workers' Compensation Board

  – Alberta (WCB) as of March 31, 2009.
- About 80% of employed persons in Alberta are covered by WCB. This report focuses
  on all industry activity in Alberta covered by the WCB and by the provincial legislation
  for occupational health and safety. Most industry sectors are included but notable
  exceptions consist of the Government of Canada, and parts of the agriculture and
  finance sectors. Several professional groups (i.e. the teaching and medical professions)
  are also excluded as are some industries where WCB coverage is not compulsory.
- Injury claim rates based on a small number of person-years worked are too volatile to make valid comparisons over time. Therefore, claim rates are not calculated when there are fewer than 40 person-years worked. Duration rates are also volatile when based on a small number of lost-time claims. Duration rates are not calculated when there are fewer than 30 lost-time claims.
- Estimates of year-over-year change for rates presented in this report are calculated using unrounded figures and may not match those produced from rounded figures.
   Percentages displayed in tables may also not total 100, due to rounding.
- Throughout the report, the lost-time claim rate is the number of lost-time claims per 100 person-years worked, the disabling injury rate is the number of disabling injury claims per 100 person-years worked and the duration rate is the number of days lost per 100 person-years worked. Fatality rates are expressed as the number of fatalities per million person-years worked.
- Analyses by industry are based on WCB industry classification and aggregation. For more information see <a href="http://ds.wcb.ab.ca/WCB.RateManual.WebServer/alphaindex.aspx">http://ds.wcb.ab.ca/WCB.RateManual.WebServer/alphaindex.aspx</a>.
- Analyses by occupation group are based on the National Occupational Classification (NOC). The NOC provides a standard list of occupations across the country. For more information see <a href="http://www5.hrsdc.gc.ca/NOC">http://www5.hrsdc.gc.ca/NOC</a>.
- Occupational injuries and diseases listed throughout this report are based on the Z795
  Coding of Work Injury or Disease Information produced by the Canadian Standards
  Association (CSA) for categorizing occupational injury and disease. For information
  see <a href="http://www.shopcsa.ca/onlinestore/GetCatalogItemDetails.asp?mat=2416404">http://www.shopcsa.ca/onlinestore/GetCatalogItemDetails.asp?mat=2416404</a>.
- Terms, definitions and formulas used throughout this report are described in Appendix A.

# INTRODUCTION

## Role of the Ministry of Employment and Immigration

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The Ministry of Employment and Immigration includes the reporting entity of the Department of Employment and Immigration (E&I). E&I develops and delivers policies, programs and services to foster labour force development; ensure fair, safe and healthy workplaces; and help those in need. The Department also provides leadership for immigration and interprovincial labour mobility policy for the Government of Alberta, and coordinates resources to support the settlement and integration of new Albertans. The Occupational Health and Safety Council (OHSC) is an administrative body that performs an advisory function in accordance with the power and authority specified under the Occupational Health and Safety Act.

# Occupational Injuries and Diseases in Alberta – Alberta Motor Transport Association Industries 2004 to 2008

E&I prepares this annual report to provide analysis of workplace health and safety information to meet the demand from industry and safety associations, labour organizations, employers and workers for incorporating this information into their strategic plans for enhancing workplace health and safety. This includes:

- descriptions of programs and initiatives undertaken in pursuit of its workplace health and safety mission and goals;
- analysis of provincial occupational injury and disease information;
- estimations of the risk of injury or disease at the provincial, industry sector and industries level as well as general descriptions about the incidents and injured workers.

The Occupational Injuries and Diseases in Alberta publications present analysis of aggregate injury claim data to allow for the tracking of workplace health and safety performance over time. This is important for evaluating past and present performance, and in providing strategic information for the direction of workplace health and safety policy. The analysis contained in this report provides a comprehensive picture of workplace injuries in the province, allowing for a prevention focus to be made based on injury probabilities, rather than possibilities.

### **Healthy and Productive Workplaces**

E&I promotes safe, healthy and productive workplaces, as well as fair, equitable and stable labour relations to ensure a fair, safe and healthy work environment for Alberta's workers. Work is central to people's lives, and to the stability of families and societies. People want work that provides them with an acceptable standard of living. It is important that workers enter an environment where their health and safety are protected, where they are treated

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with respect and they are compensated fairly for the job they are doing. This results in an attractive workplace that furthers the position of Alberta employers to be competitive in the global economy (see Note 1.1). Alongside the human cost of occupational injuries and

diseases and the impact on families and society, the economic costs are numerous.

Direct compensation payments for occupational injury and disease by WCB are projected to total \$740 million in 2009. These costs are ultimately paid by employers through premium payments, and impact the costs of running a business as well as the final cost of delivering products and services. Further costs associated with occupational injuries and diseases include the material damage to equipment and premises, the additional cost of hiring staff to cover for injured workers, and the absence. Additional impacts of poor health and

Research by the International Institute for Management Development and the World Economic Forum suggests that the safest-working countries also have the best competitiveness ratings (ILO, XVIIth World Congress on Safety and Health at Work, Introductory Report: Decent Work-Safe Work, September 2005).

hiring staff to cover for injured workers, and the lost productivity resulting from the absence. Additional impacts of poor health and safety for employers include higher absenteeism and lower morale of employees, loss of skilled and experienced employees, loss of the company's investment in training, and difficulty recruiting high-quality employees due to the loss of image (particularly in the case of subcontractors to larger companies) all leading to losses in productivity and underutilization of production (see Note 1.2).

Other costs borne by the economy and society due in part to work-related injuries and diseases include early retirements, unemployment and poorer households. The International Labour Organization (ILO) estimates that in high-income countries, around 40% of all

retirements (before statutory age) are caused by disability. This is equivalent to around 14% of the lifetime working capacity of the employed labour force.<sup>2</sup> Occupational injuries and diseases also affect unemployment and household income levels. Workers with an impairment of capacity can reduce their re-employability and impact household income. Workplace injuries and diseases typically reduce the overall earnings of households and in certain cases, family members have to give up jobs in order to care for an injured worker.

Note 1.2
The International Labour
Organization (ILO) estimates
that approximately 4% of Gross
Domestic Product is lost due to
occupational injuries and
diseases (ILO, World Day for
Safety and Health at Work 2009
-Facts on safety and health at
work issues, April 2009).

<sup>2</sup> See the International Labour Organization report: Safety in numbers – pointers for a global safety culture at work <a href="http://www.ilo.org/public/english/protection/safework/worldday/report\_eng.pdf">http://www.ilo.org/public/english/protection/safework/worldday/report\_eng.pdf</a>

See the Workers' Compensation Board Alberta 2009 Premium Rate Manual <a href="http://www.wcb.ab.ca/pdfs/employers/09\_premium\_rate\_manual.pdf">http://www.wcb.ab.ca/pdfs/employers/09\_premium\_rate\_manual.pdf</a>

#### PROVINCIAL SUMMARY

# The positive trend continues: there were fewer injuries reported and more person-years worked in 2008.

In recent years, improvements were made to the analysis of WCB claim information allowing for modified work claims to be analyzed alongside lost-time claims. Using

modified work claim data in addition to lost-time claim data ensures a more comprehensive picture of workplace injuries, and allows for greater insight into incident prevention.

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A lost-time claim is a claim submitted to the WCB for an occupational injury or disease that causes a worker to have time away from work beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function (for example, hearing loss claims).

#### Note 2.1

- The <u>lost-time claim rate</u> represents the probability or risk of an injury or disease to a worker requiring time away from work, during a period of one year of work.
- The <u>disabling injury rate</u> represents the probability or risk of a disabling injury.

A modified work claim is submitted for an occupational injury or disease where workers have their normal work duties altered enabling them to remain working without losing time from work. Included in the figures are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease, and cases where workers were provided modified duties prior to time lost because of an injury or disease.

Modifying an injured worker's duties can be beneficial for both an employer and an employee. For the employer, the financial cost of an absent worker can be high and returning an injured employee to work as soon as it is medically possible is important for properly managing compensation, disability claims and productivity levels. For the employee, returning to work as soon as medically possible is beneficial both physically and psychologically, and is linked to quicker recovery rates and higher self-esteem. Long absences from the workplace are also linked to decreases in labor market attachment.

The number of disabling injury claims reflects both the lost-time and modified work concepts and produces an overall figure where an occupational injury or disease disables a worker causing either time lost from work or for normal work duties to be modified.

In 2008, a total of 31,410 lost-time claims were accepted by WCB. This is a decrease of 8.2% from 2007. In contrast, the person-years worked estimates increased by 3.7% to 1,671,916 between 2007 and 2008 (see Table 2.1). Expressed as a lost-time claim rate, the data translates into a rate of 1.88 per 100 person-years worked, a decrease of 11.6% from 2007, as proportionately there were fewer lost-time injury claims. The 2008 rate is the

lowest in the past eighteen years and since 1991, the lost-time claim rate has decreased by 54.5%. Since 2004, the lost-time claim rate has decreased by 26.2%.

Table 2.1

Provincial Figures – Alberta: 2007 and 2008

	2007	2008	% Change
Person-years worked	1,611,892	1,671,916	3.7%
Lost-time claims	34,227	31,410	-8.2%
Lost-time claim rate	2.12	1.88	-11.6%
Modified work claims	42,491	51,725	21.7%
Lost-time claims involving modified work	14,245	22,443	57.6%
Disabling injury claims	62,473	60,692	-2.9%
Disabling injury rate	3.88	3.63	-6.3%
Duration rate	48	41	-13.9%
Days lost (LTC)	767,671	689,523	-10.2%
Compensation payments (LTC)	\$219,296,722	\$211,054,921	-3.8%

Data Source: WCB Data, Prepared by Data Development and Evaluation

The total number of modified work claims submitted in 2008 was 51,725, an increase of 21.7%. There were 22,443 claims involving both lost-time and modified work. The number of disabling injury claims was 60,692, a decrease of 2.9% from 2007. The number of lost-time claims involving modified work increased by 57.6% from 2007, indicative of improving claims management. Expressed as a rate, the 2008 disabling injury rate was 3.63 per 100 person-years worked, a decrease of 6.3% from the 2007 rate of 3.88.

Estimates of injury and disease severity are calculated using information on the number of days lost from work. Three basic measures of severity are the duration rate, median days lost from work and average days lost from work. The severity of the injuries and diseases decreased in 2008, as reflected by a lower duration rate and a decrease in average days lost. The efforts of employers to introduce modified work programs to integrate injured workers back into the workforce also has a positive impact on work days lost. The duration rate of 41 days lost per 100 person-years worked was 13.9% lower than in 2007. The median number of work days lost in 2008 was seven, the same as 2007, and the average days lost decreased to 22.0, from 22.4 in 2007.

Table 2.2 displays the lost-time claim and disabling injury figures and rates for the province, and also for the major industry sectors in Alberta. The data provides a useful setting for analyzing the health and safety performance of the AMTA industries.

The 2008 lost-time claim rate for the AMTA industries of 3.82 per 100 person-years worked is higher than all major industry sectors. The disabling injury rate for the AMTA industries of 5.49 per 100 person-years worked is higher than all major industry sectors except for the Manufacturing, Processing and Packaging sector.

Table 2.2 Lost-Time Claim and Disabling Injury Rates by Major Industry Sector – Alberta: 2007 and 2008

	20	07	2008	
Major Industry Sector	Lost-Time Claim Rate	Disabling Injury Rate	Lost-Time Claim Rate	Disabling Injury Rate
Alberta	2.12	3.88	1.88	3.63
Agriculture and Forestry	2.99	3.75	2.72	3.65
Business, Personal and Professional Services	1.30	1.86	1.20	1.79
Construction and Construction Trade Services	2.32	5.05	1.91	4,65
Manufacturing, Processing and Packaging	2.75	6.50	2.24	5.78
Mining and Petroleum Development	0.76	3.02	0.66	2.92
Public Administration, Education and Health Services	2.44	3.14	2.29	3.00
Transportation, Communication and Utilities	2.94	4.70	2.69	4.42
Wholesale and Retail	2.17	3.55	1.99	3.44
AMTA Industries	4.02	5.70	3.82	5.49

Data Source: WCB Data, Prepared by Data Development and Evaluation

#### INDUSTRY SECTOR SUMMARY

# In 2008, the lost-time claim rate for the Alberta Motor Transport Association Industries was 3.82 per 100 person-years worked.

The Alberta Motor Transport Association (AMTA) industries lost-time claim rate decreased in 2008 by 4.9% to 3.82 per 100 person-years worked, from 4.02 in 2007. The disabling injury rate decreased by 3.7%, from 5.70 per 100 person-years worked in 2007 to 5.49 in 2008 (see Table 3.1). The average lost-time claim rate for all sectors in the province was 1.88 per 100 person-years worked and the average disabling injury rate was 3.63 per 100 person-years worked.

The person-years worked for the AMTA industries increased by 0.4%. The decreases in the 2008 lost-time claim and disabling injury rates for these industries were the result of the decrease in the number of lost-time and disabling injury claims. Lost-time claims decreased by 4.6% and disabling injury claims by 3.3%, meaning that despite an increase in the number of people working in this sector, the number of injury claims decreased.

Table 3.1

AMTA Industries – Alberta: 2007 - 2008

	2007	2008	% Change
Person-years worked	50,481	50,669	0.4%
Lost-time claims	2,029	1,936	-4.6%
Lost-time claim rate	4.02	3.82	-4.9%
Modified work claims	1,643	2,096	27.6%
Lost-time claims involving modified work	796	1,251	57.2%
Disabling injury claims	2,876	2,781	-3.3%
Disabling injury rate	5.70	5.49	-3.7%
Duration rate	131	116	-11.8%
Days lost (LTC)	66,227	58,626	-11.5%
Compensation payments (LTC)	\$18,572,897	\$17,938,539	-3.4%

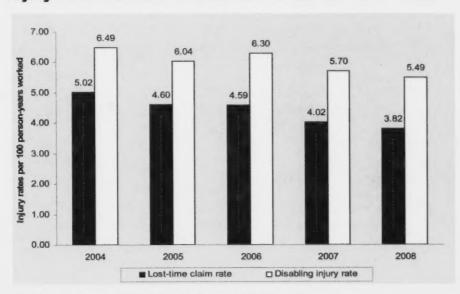
Data Source: WCB Data, Prepared by Data Development and Evaluation

Estimates of injury and disease severity are calculated using information on the number of days lost from work. Three basic measures of severity are the duration rate, median days lost from work and average days lost from work. The severity of injuries and diseases decreased in 2008, as reflected by a lower duration rate and a decrease in average days lost. The efforts of employers to introduce modified work programs to integrate injured workers back into the workforce also have a positive impact on work days lost. In 2008, the AMTA industries had a duration rate of 116, an 11.8% decrease from the 2007 rate of 131.

However, the duration rate is higher than the provincial rate of 41 by more than 180%. The median work days lost was ten, compared to the provincial figure of seven. The average days lost per claim was 30 days lost compared to the average for all sectors in the province, 22 days per claim.

Chart 3.1 shows historical lost-time and injury rates for the AMTA industries. The lost-time claim rate for the AMTA industries has decreased by 23.9% since 2004. This rate is lower than the average decrease seen for all sectors of the province, 26.2%. Since 2004, the disabling injury rate decreased by 15.4%. The average decrease in the disabling injury rate since 2004 for all sectors in the province was 9.2%.

Chart 3.1
Injury Rates for AMTA Industries – Alberta: 2004 - 2008<sup>3</sup>



Data Source: WCB Data, Prepared by Data Development and Evaluation

# Rates by Employer Size

In the AMTA industries, employers with 100 or more person-years worked had the highest lost-time claim rate of 4.88 per 100 person-years worked, followed by employers with 49 to 99 person-years worked, 4.02. Employers with 10 to 19 person-years worked had the lowest rate, 2.59 (see Table 3.2). The lost-time claim rate for employers with 100 or more person-years worked was 1.8 times higher than the average rate for all sectors in Alberta.

The disabling injury rates were higher for all employer size categories than the average trend for all sectors in the province. Employers with more than 100 person-years worked

<sup>&</sup>lt;sup>3</sup> Disabling Injury Rates are available from 2004 onwards. The rate in 2004 was produced using a 27 month period to capture information on submitted claims in the 2004 calendar year. From 2005, a consistent 15 month period has been used to capture claims for particular years, in line with the methodology for the production of Lost-Time Claim Rates.

had the highest disabling injury rate at 8.56 per 100 person-years worked, followed by employers with 40 to 99 person-years worked, 5.77 per 100 person-years worked. Employers with more than 100 person-years worked had a disabling injury rate almost double their lost-time claim rate. Lost-time claim rates and injury rates in the AMTA industries increase with the size of the employer.

Table 3.2

Lost-Time Claim and Disabling Injury Rate by Size of EmployerATMA Industries: 2008

Size of Employer	Number of Accounts	Total Person- Years Worked	Lost- Time Claims	Disabling Injuries	Lost- time Claim Rate	Disabiling Injury Rate
Less than 10 person-years worked	15,765	16,728	478	516	2.86	3.08
10 to 19 person-years worked	348	4,898	127	158	2.59	3.23
20 to 39 person-years worked	206	5,727	223	278	3.89	4.85
40 to 99 person-years worked	120	7,091	285	409	4.02	5.77
100 or more person-years worked	65	16,226	792	1,389	4.88	8.56
Unspecified	2	N/A*	31	31	N/A*	N/A*

<sup>\*</sup> These are employers with no payroll information or with person-years worked equal to zero Data Source: WCB Data, Prepared by Data Development and Evaluation

# **Distribution of Injury Claims**

Table 3.3 presents figures for the proportion of employers in the AMTA industries without lost-time claims or disabling injury claims in 2008. Table 3.4 displays figures for the number of claims submitted by employers.

Table 3.3

Proportion of Employers with no Lost-Time or Disabling Injury
Claims – AMTA Industries: 2008

Proportion of Employers	With no Lost- Time Claims	With no Disabling Injury Claims
AMTA Industries	95%	95%

Data Source: WCB Data, Prepared by Data Development and Evaluation

For the AMTA industries, 95% of employers had no lost-time claims and 95% of employers had no disabling injury claims. In other words, the injuries and diseases happening are the result of incidents occurring at the operations of about 5% of employers (see Table 3.3). These figures however, are influenced by employer size. In 2008, the number of employers with no lost-time claims and the number of employers with no disabling injury claims translates to approximately 48% and 43% of the total person-years worked in the AMTA industries respectively (see Table 4.10).

Table 3.4 indicates that among those employers with claims, 70% of the employers submitted one lost-time claim, 23% two to five claims and around 7% six or more lost-time claims. For disabling injury claims, similar proportions exist and the number of employers submitting six or more disabling injury claims was about 9% (see Table 3.4).

Table 3.4

Proportion of Employers with Claims – AMTA Industries: 2008

1 Lost-Time Claim	2 to 5 Lost-Time	6 to 20 Lost-Time	Over 20 Lost-
	Claims	Claims	Time Claims
70%	23%	5%	2%
1 Disabling Injury	2 to 5 Disabling	6 to 20 Disabling	Over 20 Disabling
Claim	Injury Claims	Injury Claims	Injury Claims
67%	25%	7%	2%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Employers that submitted one to five lost-time claims and employers that submitted one to five disabling injury claims both accounted for around 26% of the total person-years worked in the AMTA industries respectively. Employers that submitted six or more lost-time claims and employers that submitted six or more disabling injury claims accounted for approximately 26% and 31% of the total person-years worked in the AMTA industries.

## **INDUSTRY SECTOR ANALYSIS**

# Garbage Collection and Disposal Services sub-sector has the highest lost-time claim rate of all the AMTA industries.

On average the Garbage Collection and Disposal Services sub-sector has the highest lost-time claim rate of the AMTA industries. In 2008, the Specialized Trucking sub-sector displayed a 48.5% decrease in lost-time claim rate. This is the largest decrease in its lost-time claim rate since 2004, and gave the sub-sector the lowest lost-time claim rate in 2008, 2.23 per 100 person-years worked (see Table 4.1).

Table 4.1

Lost-Time Claim Rate by AMTA Industries — Alberta: 2004-2008

Sub-Sector	2004	2005	2006	2007	2008
AMTA	5.02	4.60	4.59	4.02	3.82
Specialized Trucking	4.33	3.79	4.00	2.65	2.23
General Delivery Services Trucking	5.06	4.66	4.64	4.04	3.88
Garbage Collection and Disposal Services	4.97	4.39	4.31	5.07	4.39

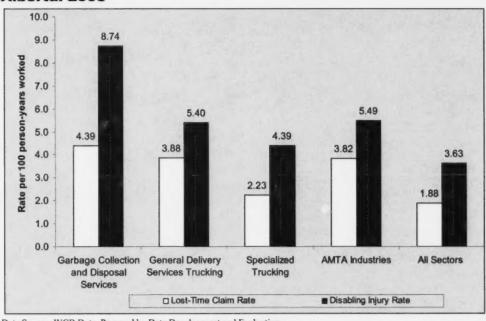
Data Source: WCB Data, Prepared by Data Development and Evaluation

Table 4.1 shows that lost-time claim rates have decreased for all the industries since 2004. For example, in 2008 the General Delivery Services Trucking sub-sector had a lost-time claim rate of 3.88 per 100 person-years worked, a 23.3% decrease from 2004. In 2008, the Garbage Collection and Disposal Services sub-sector had the highest lost-time claim rate at 4.39 per 100 person-years worked. This rate has decreased by 13.4% from the rate in 2007.

In 2008, the Garbage Collection and Disposal Services sub-sector had the highest injury rate at 8.74 per 100 person-years worked. This rate has increased by 0.8% from the rate in 2007. The Specialized Trucking sub-sector had the lowest injury rate at 4.39 per 100 person-years worked. Overall, all the industries of AMTA industries have higher lost-time claim rates and disabling injury rates than the average rate for all sectors of the province (see Chart 4.1).

Chart 4.1

Lost-Time Claim and Disabling Injury Rates by AMTA Industries —
Alberta: 2008



Data Source: WCB Data, Prepared by Data Development and Evaluation

### **Specialized Trucking**

In 2008, the Specialized Trucking sub-sector had a lost-time claim rate of 2.23 per 100 person-years worked, a 15.6% decrease from 2007. The disabling injury rate was 4.39 per 100 person-years worked. The duration rate increased from 113 days lost per 100 person-years worked in 2007 to 122 in 2008, an increase of 7.2% (see Table 4.2). Between 2004 and 2008, the Specialized Trucking sub-sector experienced a 48.5% decrease in its lost-time claim rate.

Table 4.2

Specialized Trucking — Alberta: 2007-2008

	2007	2008	% Change
Person-years worked	2,380	2,417	1.5%
Lost-time claims	63	54	-14.3%
Lost-time claim rate	2.65	2.23	-15.6%
Modified work claims	70	87	24.3%
Lost-time claims involving modified work	25	35	40.0%
Disabling injury claims	108	106	-1.9%
Disabling injury rate	4.54	4.39	-3.3%
Duration rate	113	122	7.2%
Days lost (LTC)	2,698	2,938	8.9%
Compensation payments (LTC)	\$896,256	\$782,964	-12.6%

Data Source: WCB Data, Prepared by Data Development and Evaluation

#### **General Delivery Services Trucking**

The General Delivery Services Trucking sub-sector was the largest in the AMTA industries, representing 91.1% of person-years worked, 92.5% of lost-time claims, and 89.7% of disabling injury claims in these industries. The lost-time claim rate in 2008 was 3.88 per 100 person-years worked, a 4.0% decrease from 2007. The disabling injury rate was 5.40 per 100 person-years worked. The duration rate decreased from 135 days lost per 100 person-years worked in 2007 to 117 in 2008 (see Table 4.3). Since 2004, the lost-time claim rate in the General Delivery Services Trucking sub-sector has decreased by 23.3%. This decrease was caused by a drop in lost-time claims coupled with an increase in the number of person-years worked over this same time period.

Table 4.3 **General Delivery Services Trucking** — **Alberta: 2007-2008** 

	2007	2008	% Change
Person-years worked	45,930	46,180	0.5%
Lost-time claims	1,856	1,791	-3.5%
Lost-time claim rate	4.04	3.88	-4.0%
Modified work claims	1,453	1,852	27.5%
Lost-time claims involving modified work	729	1,149	57.6%
Disabling injury claims	2,580	2,494	-3.3%
Disabling injury rate	5.62	5.40	-3.9%
Duration rate	135	117	-13.2%
Days lost (LTC)	61,943	54,075	-12.7%
Compensation payments (LTC)	\$16,936,772	\$16,600,972	-2.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

#### **Garbage Collection and Disposal Services**

The Garbage Collection and Disposal Services sub-sector had a lost-time claim rate of 4.39, while the disabling injury rate was 8.74 per 100 person-years worked, the highest in the AMTA industries. The duration rate increased from 73 in 2007 to 78 days lost per 100 person-years worked in 2008 (see Table 4.4).

Between 2004 and 2008, the lost-time claim rate for the Garbage Collection and Disposal Services sub-sector has dropped by 11.8%, from 4.97 in 2004 to 4.39 per 100 person-years worked in 2008.

Table 4.4

Garbage Collection and Disposal Services — Alberta: 2007-2008

	2007	2008	% Change
Person-years worked	2,169	2,072	-4.5%
Lost-time claims	110	91	-17.3%
Lost-time claim rate	5.07	4.39	-13.4%
Modified work claims	120	157	30.8%
Lost-time claims involving modified work	42	67	59.5%
Disabling injury claims	188	181	-3.7%
Disabling injury rate	8.67	8.74	0.8%
Duration rate	73	78	6.5%
Days lost (LTC)	1,586	1,613	1.7%
Compensation payments (LTC)	\$739,869	\$554,603	-25.0%

# Distribution of injury claims

Table 4.5 presents figures for the proportion of employers without lost-time or disabling injury claims in 2008, by sub-sector. Table 4.6 displays figures on the proportion of the person-years worked accounted for by employers without lost-time or disabling injury claims. Table 4.7 displays figures for the number of claims submitted by employers.

Table 4.5

Proportion of Employers with no Lost-Time or Disabling Injury
Claims, for the AMTA Industries – Alberta: 2008

Proportion of Employers by Sub-Sector	With no Lost- Time Claims	With no Disabling Injury Claims
AMTA Industries	95%	95%
Specialized Trucking	96%	95%
General Delivery Services Trucking	95%	95%
Garbage Collection and Disposal Services	86%	84%

Data Source: WCB Data, Prepared by Data Development and Evaluation

The Specialized Trucking sub-sector had a higher proportion of employers with no lost-time claims than the average for all AMTA industries, indicating a more highly concentrated occurrence of injury in this sub-sector (see Table 4.5). These figures however, are influenced by employer size. In 2008, the number of employers in this sub-sector with no lost-time claims translates to approximately 65% of the total person-years worked (see Table 4.6).

Table 4.6

Proportion of Person-years accounted for by Employers with no Lost-Time or Disabling Injury Claims, for the AMTA Industries – Alberta: 2008

Proportion of person-years accounted for by employers	With no Lost- Time Claims	With no Disabling Injury Claims	
AMTA Industries	48%	43%	
Specialized Trucking	65%	40%	
General Delivery Services Trucking	48%	44%	
Garbage Collection and Disposal Services	29%	24%	

Data Source: WCB Data, Prepared by Data Development and Evaluation

For employers who did submit claims, the Garbage Collection and Disposal Services subsector had the highest proportion submitting over six claims. This is partly a reflection of

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the risks of working in these industries, but it is also influenced by the number and size of employers (see Table 4.7).

Table 4.7

Proportion of Employers with Lost-Time or Disabling Injury Claims, for the AMTA Industries – Alberta: 2008

Sub-Sector	1 Lost-Time Claim	2 to 5 Lost- Time Claims	6 to 20 Lost- Time Claims	Over 20 Lost- Time Claims
Specialized Trucking	69%	31%	0%	0%
General Delivery Services Trucking	70%	23%	5%	29
Garbage Collection and Disposal Services	68%	21%	12%	0%

Sub-Sector	1 Disabling Injury Claim	2 to 5 Disabling Injury Claims	6 to 20 Disabling Injury Claims	Over 20 Disabling Injury Claims
Specialized Trucking	62%	28%	10%	0%
General Delivery Services Trucking	67%	24%	6%	2%
Garbage Collection and Disposal Services	58%	26%	11%	5%

Data Source: WCB Data, Prepared by Data Development and Evaluation

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# DEMOGRAPHICS OF INJURED WORKERS

# **Injured Worker Characteristics**

In 2008, the Transportation Equipment Operators and Related Workers (Excluding Labourers) occupational group accounted for 72.4% of lost-time claims, 66.0% of disabling injury claims and 36.0% of those in employment in the AMTA industries. In contrast, clerical occupations accounted for 6.2% of lost-time claims, 8.6% of disabling injury claims and 18.6% of those in employment in the AMTA industries (see Table 5.1).

Table 5.1

Lost-Time and Disabling Injury Claims by Selected Occupation

Group — AMTA Industries: 2008

Occupation Group	Lost-time Claims	Disabling Injury Claims	Employment
Transportation Equipment Operators and Related Workers, Excl. Labourers	72.4%	66.0%	36.0%
Trades Helpers, Construction, and Transportation Labourers and Related Occupations	12.7%	15.0%	5.8%
Clerical Occupations	6.2%	8.6%	18.6%
Mechanics	2.5%	3.2%	5.3%
Heavy Equipment and Crane Operators (Including Drillers)	1.4%	1.8%	2.7%

Data Source: WCB Data, Prepared by Data Development and Evaluation; Statistics Canada, Labour Force Survey (Microdata Files)

In 2008, 51.8% of lost-time claims and 49.9% of disabling injury claims in the AMTA industries were from workers aged between 35 and 54 years. Young workers, aged 15 to 24 years, accounted for 10.3% of lost-time claims, 13.2% of disabling injury claims and approximately 10.2% of those in employment (see Table 5.2).

<sup>&</sup>lt;sup>4</sup> Statistics Canada, Labour Force Survey (Microdata Files) for the Transportation, Warehousing and Utilities industries

Table 5.2

Lost-Time Claims by Age — AMTA Industries: 2007-2008

		2007				20		
Time	Lost- Time Claims	%	Disabling Injury Claims	%	Lost- Time Claims	%	Disabling Injury Claims	%
15-19 Years	55	2.7%	105	3.7%	50	2.6%	99	3.6%
20-24 Years	184	9.1%	318	11.1%	149	7.7%	269	9.7%
25-34 Years	391	19.3%	624	21.7%	366	18.9%	597	21.5%
35-44 Years	563	27.7%	779	27.1%	518	26.8%	736	26.5%
45-54 Years	502	24.7%	659	22.9%	484	25.0%	653	23.5%
55-64 Years	264	13.0%	319	11.1%	296	15.3%	348	12.5%
65+ Years	70	3.4%	72	2.5%	73	3.8%	79	2.8%
Unspecified	0	N/A	0	N/A	0	N/A	0	N/A
Total	2,029	100.0%	2,876	100.0%	1,936	100.0%	2,781	100.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

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In the AMTA industries, the majority of claims were from men. In 2008, 90.7% of lost-time claims and 89.4% of disabling injury claims involved men, while they made up approximately 71.9% of those in employment<sup>5</sup>. In contrast women accounted for 9.3% of lost-time claims, 10.6% of disabling injury claims and 28.1% of those in employment (see Table 5.3).

Table 5.3

Lost-Time Claims by Gender — AMTA Industries: 2007-2008

	2007				20			
Gender	Lost- Time Claims	%	Disabling Injury Claims	%	Lost- Time Claims	%	Disabling Injury Claims	%
Women	172	8.6%	300	10.6%	181	9.3%	295	10.6%
Men	1,825	91.4%	2,541	89.4%	1,755	90.7%	2,477	89.4%
Unspecified	32	N/A	35	N/A	0	N/A	9	N/A
Total	2,029	100.0%	2,876	100.0%	1,936	100.0%	2,781	100.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

<sup>&</sup>lt;sup>5</sup> Statistics Canada, Labour Force Survey (Microdata Files) for the Transportation, Warehousing and Utilities industries

#### **INJURY AND DISEASE ANALYSIS**

Overexertion was the most common cause for lost-time claims. Sprains, strains and tears continued to be the leading nature of injury with the trunk being the most commonly injured body part.

# **Nature of Injury or Disease**

The nature of injury is used to identify the physical characteristics of the injury or disease. In 2008, 94.6% of lost-time claims and 95.6% of disabling injury claims were caused by traumatic injuries and disorders. The three most common traumatic injuries and disorders were: sprains, strains and tears, fractures and dislocations, and surface wounds and bruises (see Table 6.1).

Note 6.1
Throughout this section, the classifications used are based on the Canadian Standards
Association (CSA) standards for categorizing occupational injury and disease information.

Compared to the average for all sectors in the province, the AMTA industries had higher proportions<sup>6</sup> of lost-time claims and disabling injury claims than the average in most injury categories. Lost-time claims for fractures and dislocations and other traumatic injuries and disorders had proportions 2.5 and 2.3 times higher than the average for all sectors, indicating a higher likelihood of this type of injury occurring. For disabling injury claims these injury categories had proportions that were 2.0 and 1.7 times higher than the average for all sectors.

Note 6.2
The CSA standard is designed so that Nature of Injury and Part of Body categories are directly linked when classifying injuries. This is also true for the relationship between the Source of Injury and Type of Event categories.

<sup>&</sup>lt;sup>6</sup> The proportion or number of times higher or lower compares the AMTA industries' claim rate and proportion of injuries by each injury type against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.1

Nature of Injury or Disease — AMTA Industries: 2008

Nature of Injury	Lost-Time Claims	%	Disabling Injury claims	%
Traumatic Injuries and Disorders	1,832	94.6%	2,658	95.6%
Sprains, Strains and Tears	991	51.2%	1,459	52.5%
Fractures and Dislocations	228	11.8%	279	10.09
Surface Wounds and Bruises	234	12.1%	375	13.5%
Open Wounds	83	4.3%	151	5.49
Burns	24	1.2%	32	1.29
Other Traumatic Injuries and Disorders	272	14.0%	362	13.09
Systemic Diseases and Disorders	81	4.2%	96	3.5%
Infectious and Parasitic Disorders	0	0.0%	0	0.09
Neoplasms, Tumors and Cancer	0	0.0%	0	0.09
Symptoms, Signs and Ill-Defined Conditions	7	0.4%	7	0.39
Multiple Diseases, Conditions and Disorders	1	0.1%	1	0.09
Other Diseases, Conditions and Disorders	7	0.4%	7	0.39
Nature of Injury - Unknown	8	0.4%	12	0.49
Total	1,936	100.0%	2,781	100.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

# Part of Body Injured

In 2008, the trunk was the main injured body part, accounting for 42.8% of lost-time claims and 40.6% of disabling injury claims in the AMTA industries, followed by lower extremities at 21.8% and 22.7%. The most common trunk injury was to the back, including spine and spinal cord, representing 25.5% of lost-time claims and 24.5% of disabling injury claims (see Table 6.2).

Compared to the average for all sectors in the province, the AMTA industries had higher proportions<sup>7</sup> of lost-time claims in most injury categories. For lost-time claims, multiple body parts and other trunk had the highest proportions, 2.8 and 2.7 times higher in the AMTA industries than the average for all sectors in the province. For disabling injury claims, these body parts were 2.3 and 1.8 times higher. Injuries to other head parts and the lower extremities displayed proportions that both were 2.1 times higher than the frequency for all sectors in the province.

The proportion or number of times higher or lower compares the AMTA industries' claim rate and proportion of injuries by each injury type against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.2

Part of Body Injured — AMTA Industries: 2008

Part of Body Injured	Lost-Time Claims	%	Disabling Injury Claims	%
Trunk	829	42.8%	1,130	40.6%
Back, Including Spine, Spinal Cord	494	25.5%	682	24.5%
Other Trunk	335	17.3%	448	16.1%
Lower Extremities	423	21.8%	632	22.7%
Ankle(s) and Foot (Feet) Except Toes	215	11.1%	324	11.7%
Leg(s)	181	9.3%	273	9.8%
Other Lower Extremities	27	1.4%	35	1.3%
Upper Extremities	290	15.0%	531	19.1%
Wrist(s) and Hand(s) Except Finger(s)	114	5.9%	193	6.9%
Finger(s), Fingernail(s)	gernail(s) 69	3.6%	156	5.6%
Other Upper Extremities	107	5.5%	182	6.5%
Multiple Body Parts	181	9.3%	220	7.9%
Head	148	7.6%	187	6.7%
Eye(s)	24	1.2%	30	1.1%
Other Head Parts	124	6.4%	157	5.6%
Neck, Including Throat	49	2.5%	63	2.3%
Body Systems	9	0.5%	10	0.4%
Part of Body - Unknown	6	0.3%	6	0.2%
Other Body Parts	1	0.1%	2	0.1%
Total	1,936	100.0%	2,781	100.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

# Source of Injury or Disease

The source of injury or disease describes the object or substance that the worker came into contact resulting in an injury or disease. In 2008, structures and surfaces and vehicles, the two primary sources of injury, accounted for 44.5% of lost-time claims and 39.6% of disabling injury claims (see Table 6.3).

Compared to the average for all sectors in the province, the AMTA industries had higher proportions of lost-time claims in most injury categories. Vehicles, containers and structures and surfaces displayed proportions that were 5.0, 2.6 and 2.5 times higher than the average for all sectors. For disabling injury claims, these sources of injury had proportions that were 4.0, 2.2 and 1.9 times higher than the average for all sectors.

<sup>&</sup>lt;sup>8</sup> The proportion or number of times higher or lower compares the AMTA industries' claim rate and proportion of injuries by each injury type against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.3
Source of Injury or Disease — AMTA Industries: 2008

Source of Injury	Lost-Time Claims	%	Disabling Injury Claims	%
Vehicles	416	21.5%	531	19.1%
Structures and Surfaces	445	23.0%	571	20.5%
Persons, Plants, Animals and Minerals	285	14.7%	430	15.5%
Person-Injured or Ill Worker	262	13.5%	400	14.4%
Minerals - Metallic or Nonmetallic (except fuel)	7	0.4%	10	0.4%
Person-Other Than Injured or Ill Worker*	6	0.3%	8	0.3%
Other Persons, Plants, Animals & Minerals	10	0.5%	12	0.4%
Containers**	257	13.3%	413	14.9%
Parts and Materials	234	12.1%	369	13.3%
Tools, Instruments and Equipment	63	3.3%	102	3.7%
Hand Tools - Nonpowered	18	0.9%	37	1.3%
Hand Tools - Powered	5	0.3%	6	0.2%
Other Tools and Equipment	40	2.1%	59	2.1%
Machinery	44	2.3%	78	2.8%
Furniture and Fixtures	39	2.0%	50	1.8%
Chemicals and Chemical Products	21	1.1%	27	1.0%
Other Sources	72	3.7%	99	3.6%
Source of Injury - Unknown	60	3.1%	111	4.0%
Total	1,936	100.0%	2,781	100.0%

<sup>\*</sup> Person – other than injured or ill worker: classifies workplace injuries or illnesses inflicted by family members as well as non-family relations, including co-workers, former co-workers, and patients.

Data Source: WCB Data, Prepared by Data Development and Evaluation

<sup>\*\*</sup> Containers: classifies receptacles that are commonly used to hold, store or carry materials (examples: dishes, cups and glasses, luggage, etc.).



# Type of Event or Exposure

The type of event or exposure describes the incident or event that occurred at the time of the exposure that directly resulted in the injury or disease. The most common type of injury or exposure in 2008 was bodily reaction or exertion which accounted for 38.2% of lost-time claims and 39.9% of disabling injury claims.

Lost-time claims caused by transportation accidents had a proportion<sup>9</sup> that was 5.1 times higher in the AMTA industries than the average for all sectors in the province. Disabling injury claims for this category were 4.1 times higher than the average for all sectors. Falls to a lower level and falls on the same level had proportions for lost-time claims that were 3.3 and 2.2 times higher in the AMTA industries than the average for all sectors in the province. For disabling injury claims these types of events had proportions 2.7 and 1.8 times higher than the average for all sectors in the province.

<sup>&</sup>lt;sup>9</sup> The proportion or number of times higher or lower compares the AMTA industries' claim rate and proportion of injuries by each injury type against the average claim rate and injury proportion for all sectors in the province. A value equal to 1 indicates an equal probability or likelihood to the average. A value higher than 1 indicates an increased likelihood of this type of injury occurring, and a value less than one indicates a lower likelihood. See Appendix A for calculation details.

Table 6.4

Type of Event or Exposure — AMTA Industries: 2008

ype of Event or Exposure	Lost-Time Claims	%	Disabling Injuries	%
Bodily Reaction or Exertion	739	38.2%	1,109	39.9%
Overexertion	447	23.1%	663	23.8%
Bodily Reaction*	225	11.6%	343	12.3%
Repetitive Motion	28	1.4%	43	1.5%
Other Bodily Reaction/Exertion	39	2.0%	60	2.2%
Contact with Objects or Equipment	364	18.8%	627	22.5%
Struck by Object	190	9.8%	328	11.8%
Caught in Object	61	3.2%	124	4.5%
Struck against Object	80	4.1%	124	4.5%
Rubbed or Abraded	13	0.7%	14	0.5%
Other Contact with Object/Equipment	20	1.0%	37	1.3%
Falls	468	24.2%	608	21.9%
Fall on Same Level	259	13.4%	348	12.5%
Fall to Lower Level	177	9.1%	216	7.8%
Other Falls	32	1.7%	44	1.6%
Transportation Accidents	264	13.6%	306	11.0%
<b>Exposure to Harmful Substances</b>	64	3.3%	75	2.7%
Assaults and Violent Acts	9	0.5%	13	0.5%
Assaults and Violent Acts by Person(s)	4	0.2%	6	0.2%
Other Assaults and Violent Acts	5	0.3%	7	0.3%
Fires and Explosions	7	<0.1%	7	<0.1%
Other Events or Exposures	0	0.0%	0	0.0%
Type of Event - Unknown	21	1.1%	36	1.3%
Total	1,936	100.0%	2,781	100.0%

<sup>\*</sup> Bodily reaction: injuries or illnesses resulting from a single incident of free bodily motion which imposed stress or strain on some part of the body.

Data Source: WCB Data, Prepared by Data Development and Evaluation

# **Duration of Disability**

Duration of disability<sup>10</sup> is intended to reflect the severity of the effects of occupational injury and disease as reflected by the number of days off work. However, the efforts of employers to introduce modified work programs to integrate injured workers more quickly back into the workforce can reduce workdays lost.

In 2008, 45.3% of claims had duration of disability of less than ten days, while 19.6% of the total lost-time claims resulted in 51 days or more lost from work (see Table 6.5). For all sectors in the province, 55.2% of lost-time claims had duration of disability of less than ten days, while 12.6% of claims required 51 or more days away from work.

Table 6.5 **Duration of Disability — Alberta: 2008** 

<b>Duration of Disability</b>	% of AMTA Industries' Lost-Time Claims	% of Lost-Time Claims in the Province	
1-5 Days	32.5%	40.9%	
6-10 Days	12.8%	14.3%	
11-15 Days	7.5%	7.6%	
16-20 Days	4.5%	5.0%	
21-30 Days	7.6%	6.7%	
31-40 Days	5.9%	4.7%	
41-50 Days	4.5%	3.2%	
51 Days or More	19.6%	12.6%	
Unspecified	5.1%	4.8%	

Data Source: WCB Data, Prepared by Data Development and Evaluation

<sup>&</sup>lt;sup>10</sup> The duration of disability refers to the length of time, in days, for which the worker receives wage compensation from the WCB.

### **OCCUPATIONAL FATALITIES**

# In 2008 WCB accepted 14 fatalities in the AMTA industries, accounting for 8.4% of all 166 fatalities in the province.

A WCB accepted occupational fatality is defined as the death of a worker resulting from a work-related incident or exposure which has been accepted by the WCB for compensation. Some of the fatalities accepted in a particular year occurred in prior years. Unless otherwise specified, occupational fatalities in this report refer to occupational fatalities accepted by the WCB. The WCB classifies occupational fatalities into three general types:

#### **Motor Vehicle Incidents**

Motor vehicle incidents typically involve non-industrial vehicles operating on public roads in which the fatally injured worker was either the driver or a passenger. This type of occupational fatality also includes cases involving aircraft crashes, train crashes, helicopter crashes and water vehicle crashes. In 2008, eight of the 14 AMTA industries fatalities accepted by the WCB were motor vehicle incidents (see Table 7.1).

#### **Workplace Incidents**

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Workplace incidents consisted of cases in which the worker died at a worksite or as a result of injuries sustained at a worksite. This is the type of fatality that E&I typically investigates. In 2008, five of AMTA industries fatalities accepted by the WCB were workplace incidents (see Table 7.1).

# **Latent Workplace and Motor Vehicle Fatalities**

Latent fatalities consist of workers who were involved in a workplace incident or exposure, or a motor vehicle incident that did not become a fatality until a much later date, often years later. These incidents were classified as occupational diseases. From 2002, these incidents are separated out and included with either motor vehicle or workplace incident categories in accordance to their original injury.

Usually, other contributing factors cause a latent fatality, although these contributing factors are the result of the initial injury or exposure. A motor vehicle incident, where a worker received leg injuries requiring surgery is a good example of this. Complications during the surgery result in a blood clot causing a fatal stroke. Thus, the injury is classified latent because the original injury caused the requirement for surgery. In 2008, one of the workplace incidents in the AMTA industries was a latent fatality.

#### **Occupational Disease**

Occupational disease fatalities consist mostly of recognized occupational disease, that is, disease known to be primarily or exclusively work-related such as asbestosis and coal workers' pneumoconiosis. This category also includes heart attacks suffered on the job. Occupational diseases are frequently diagnosed several years after the initial or crucial exposure to the toxic substance, and in such cases, it is difficult to determine when the fatal exposure occurred. The occupational disease category, therefore, should not be interpreted to reflect present worksite hazardous conditions or exposures.

Each year the WCB accepts some occupational fatality claims for compensation. Occupational fatality claims that were accepted in a particular year may include fatalities from prior years. In 2008, there was one occupational disease fatality accepted by WCB in the AMTA industries (see Table 7.1).

Table 7.1

Types of Occupational Fatalities Accepted by the WCB –

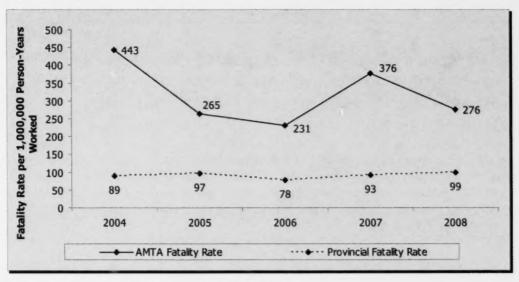
AMTA Industries: 2004 - 2008

	Motor Vehicle Incident		Workplace Incident		Occupat Disea	Total	
Year	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities
2004	15	83.3%	3	16.7%	0	0.0%	18
2005	8	66.7%	2	16.7%	2	16.7%	12
2006	8	72.7%	2	18.2%	1	9.1%	11
2007	14	73.7%	5	26.3%	0	0.0%	19
2008	8	57.1%	5	35.7%	1	7.1%	14
Total	53	71.6%	17	23.0%	4	5.4%	74

Data Source: WCB Data, Prepared by Data Development and Evaluation

The fatality rate provides an estimate of the number of fatalities in a particular year compared to the size of the working population in a particular year. It is calculated by dividing the number of accepted fatalities in the year by the number of estimated person-years worked. The result is expressed as fatalities "per million person-years worked." The 2008 fatality rate in the AMTA industries was 276 per million person-years worked (see Chart 7.1). The average fatality rate for all sectors in the province in 2008 was 99 per million person-years worked.





Data Source: WCB Data, Prepared by Data Development and Evaluation

Between 2004 and 2008, the WCB accepted 74 fatalities in the AMTA industries. The General Delivery Services Trucking sub-sector accounted for the majority with 61 accepted fatalities; representing 82.4% of all fatalities in the AMTA industries (see Table 7.2).

Table 7.2

AMTA industries Occupational Fatalities Accepted by the WCB by Sub-Sector – Alberta: 2004 - 2008

Sub-Sector	2004	2005	2006	2007	2008	Number of Fatalities	%
General Delivery Services Trucking	15	9	9	15	13	61	82.4%
Specialized Trucking	3	2	1	3	1	10	13.5%
Garbage Collection and Disposal Services	0	1	1	1	0	3	4.1%
AMTA Industries	18	12	11	19	14	74	100.0%

Data Source: WCB Data, Prepared by Data Development and Evaluation

Occupational Injuries and Diseases in Alberta

Estimates are based upon information provided by the WCB. Fatalities occurring under the Government of Canada's jurisdiction are excluded from the calculation of the fatality rates.

# CERTIFICATE OF RECOGNITION

A Certificate of Recognition (COR) is given to employers who develop health and safety programs that meet established standards. Certificates are jointly issued by Certifying Partners and E&I<sup>12</sup>.

In 2008, 6.4% of AMTA industries' employers were COR holders. These employers accounted for 44.4% of all person-years worked in the AMTA industries. The Garbage Collection and Disposal Services sub-sector had the highest proportion with 9.5% of employers in this sub-sector holding a valid COR in 2008, covering 68.4% of person-years worked in this sub-sector (see Table 8.1).

Table 8.1
Employers With Valid COR — Alberta: 2008

Sub-Sector	Number of Certified Employers	Total Number of Employers	% of Total Employers Certified	% of Total Person- Years Certified 44.4%	
AMTA	1,054	16,506	6.4%		
General Delivery Services Trucking	945	15,311	6.2%	42.6%	
Specialized Trucking	86	954	9.0%	59.4%	
Garbage Collection and Disposal Services	23	241	9.5%	68.4%	

Data Source: WCB Data, Prepared by Data Development and Evaluation

In the AMTA industries, the lost-time claim rate for COR holders was 3.82 per 100 person-years worked in 2008, while the rate for non-COR holders was also 3.82. For disabling injury rates, COR holders had a rate of 6.60 per 100 person-years worked, while the rate for non-COR holders was 4.60 (see Table 8.2).

A low lost-time claim rate and high disabling injury rate can be indicative of proficient claims management. However, it may also be a reflection of larger employers having greater capacity to offer modified duties to injured workers than smaller employers.

Comparing COR holders against all non-COR holders provides useful information about each group, although it does not compare like-with-like. A COR is given to employers who develop health and safety programs that meet established standards, with this group seeing continued improvement in their lost-time claim rates. Some non-COR holders have good programs in place above this standard, whereas others do not. This makes evaluating improving health and safety trends less clear for this group.

<sup>&</sup>lt;sup>12</sup> For more information on the COR program visit <a href="http://www.employment.alberta.ca/SFW/334.html">http://www.employment.alberta.ca/SFW/334.html</a>

The two groups also differ significantly in employer structure and size. COR holders account for 6.4% of employers in the AMTA industries (see Table 8.1) but 44.4% of the person-years worked. Analysis by employer size for all sectors of the province<sup>13</sup> and for the AMTA industries show smaller employers tend to have better health and safety performance than medium-sized and large employers (see Table 3.2). Smaller employers can find it easier to adjust working practices or introduce set standards, due in part to the size of their operations. The higher levels of health and safety performance observed for small employers also reflects the different type of work undertaken by employers of different sizes.

Table 8.2

Lost-Time Claim and Disabling Injury Rates for AMTA industries

COR Holders — Alberta: 2007-2008

Employer	Year	Number of Accounts	Person- Years Worked	Lost- Time Claims	Disabling Injury Claims	Lost- Time Claim Rate	Disabling Injury Rate	in Lost- Time Claim Rate	Change in Disabiling Injury Rate
COR	2007	1,037	22,325	862	1,450	3.86	6.49	-1.0%	1.6%
	2008	1,054	22,513	861	1,485	3.82	6.60		
Non-COR	2007	15,132	28,156	1,167	1,426	4.14	5.06	-7.9%	-9.1%
	2008	15,452	28,156	1,075	1,296	3.82	4.60		

Data Source: WCB Data, Prepared by Data Development and Evaluation

<sup>13</sup> See the Occupational Injury and Diseases in Alberta 2008 Summary publication http://www.employment.alberta.ca/SFW/129.html

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# APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

#### Lost-Time Claim

A lost-time claim (LTC) is a claim for an occupational injury or disease that causes the worker to have time away from work beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function.

#### Modified Work Claim

A modified work claim is a claim for an occupational injury or disease where a worker had their normal work duties altered to enable them to remain working without losing time from work. Also included are claims where injured workers are helped back into the workplace with modified duties after time lost due to injury or disease.

#### Disabling Injury Claim

Disabling injury (DI) claims combine both the lost-time and modified work concepts to produce an overall figure where an occupational injury or disease disables the worker causing either time-lost from work or for their normal work duties to be modified.

#### Person-Years Worked

Person-years worked are estimates calculated from wage and payroll data provided by account holders to the WCB. Alberta Employment and Immigration uses data to estimate an average industry wage, and uses the average industry wage and employer payroll data to estimate person-years worked for each employer and each industry. One person-year is equivalent to one full-time worker working for one year, and can be assumed to equal 2,000 hours worked.

#### Lost-Time Claim Rate

The lost-time claim rate is calculated by dividing the number of lost-time claims by the person-year estimate, and multiplying the result by 100. The lost-time claim rate represents the probability or risk of an injury or disease to a worker during a period of one-year work, which will result in time lost from work. Comparisons of lost-time claim rates between industries, or between years, can be used to indicate increases, decreases, or differences in this risk.

LTC Rate = 
$$\frac{\text{Number of LTC's}}{\text{Person-years worked}} \times 100$$

#### Disabling Injury Rate

The disabling injury rate is calculated by dividing the number of disabling injury claims by the person-year estimates, and multiplying the result by 100. The disabling injury rate represents the probability or risk of a disabling injury or disease to a worker during a period of one year of work. The disabling injury rate is similar to the LTC rate although it covers a broader range of injuries, including those that are less severe in nature (do not require time away from work). The rate represents the number of claims per 100 person-years worked and includes claims made for both lost-time and modified work.

Disabling Injury Rate = 
$$\frac{\text{Number of DI's}}{\text{Person-years worked}} \times 100$$

### Duration (Days lost)

The duration of disability is the number of days following the injury or disease for which the worker was disabled and unable to perform normal work duties. This information is obtained for this report from data on compensation days paid on each claim from the WCB. Alberta Employment and Immigration obtains these data on March 31 of the year following the claim year, and does not update the information, even though many injured workers continue to be disabled beyond this date. As a result, the duration information reported here underestimates the true impact of lost-time injury and disease, although it provides a consistent method for reporting and observing trends in duration.

#### **Duration Rate**

The duration rate is calculated by dividing the number of workdays lost (disability days) by the person-year estimate, and multiplying by 100. The result is expressed as days lost per 100 person-years worked, and indicates, in part, the economic impact of occupational injury and disease. Duration rates are not recommended as reliable indicators of full economic cost. In addition, readers are warned that duration rates are highly unstable when based on only a few lost-time claims; it is recommended that the duration rate not be calculated based upon fewer than 30 lost-time claims.

Duration Rate = 
$$\frac{\text{Disability Days}}{\text{Person-years worked}} \times 100$$

### Industry Coverage

About 80% of employed persons in Alberta are covered by WCB. This report focuses on all industry activity in Alberta covered by the WCB and by the provincial legislation for occupational health and safety. Most industry sectors are included but notable exceptions consist of the Government of Canada, and parts of the agriculture and finance sectors. Several professional groups (i.e. the teaching and medical professions) are also excluded as are some industries where WCB coverage is not compulsory.

#### WCB Accepted Fatality

An occupational fatality is the death of a worker which resulted from a work-related incident or exposure and which has been accepted by the WCB for compensation. A fatality is counted in the year it is accepted.

#### **Fatality Rate**

The fatality rate is calculated by dividing the number of accepted fatalities by the person-years worked estimate and multiplying the result by one million. The result is expressed as fatalities per million person-years worked. Fatalities that are found under the jurisdiction of the Government of Canada are excluded before the calculation of the fatality rate.

Number of Times Higher/Lower Than the Provincial Average

The number of times higher/lower than the provincial average is used to compare the performance of the industries with the province regarding specific injury or disease. A number less than one indicates that the injury of the industries is lower than the provincial average; if equal to one it indicates the injury of the industries is the same as the provincial average and a number greater than one indicates that the injury of the industries is higher than the provincial average.

Per cent of Total Claims for the Industries	x	Industries' LTC Rate	
Per cent of Total Claims for the Province	x	Provincial LTC Rate	

Where:

Per cent of Total Claims for the Industries =

Number of LTCs for the Industries (e.g. back injury)

Total LTCs for the Industries

Per cent of Total Claims for the Province =

Number of LTCs for the Province (e.g. back injury)

Total LTCs for the Province

Labour Force Survey The Labour Force Survey (LFS) is a household survey carried out monthly by Statistics Canada. The objectives of the LFS have been to divide the working-age population into three mutually exclusive classifications (employed, unemployed, and not in the labour force) and to provide descriptive and explanatory data on each of these categories. Data from the survey provide

x 100

x 100

#### APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

information on major labour market trends such as shifts in employment across industrial sectors, hours worked, labour force participation and unemployment rates.

For the most part, annual LFS data has been analyzed alongside injury and disease information to aid the understanding of injury risk or frequency by worker type. The LFS uses a different industry classification from WCB, although there are similarities in structure. Where possible, the two data sources are used comparably and proportions (of totals) have been used to evaluate information generated from both sources. Using proportions attempts to overcome obvious distortions in the numbers in employment from both sources, although the impact on the proportions from industry coverage differences is unclear. In certain instances, monthly LFS micro-data files have been combined and used to produce proportion estimates for the whole year for particular sub-groups of the population.

For further information on the LFS, please see http://www.employment.alberta.ca/BI/2599.html

# APPENDIX B: AMTA INDUSTRIES WCB CODES<sup>14</sup>

50701 - Specialized Trucking

50714 - General Delivery Services Trucking

57901 - Garbage Collection and Disposal Services

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<sup>14</sup> Codes are Workers' Compensation Board industry codes.

# **CONTACT INFORMATION**

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#### **Employment and Immigration website:**

http://employment.alberta.ca

#### **Work Safe Alberta website:**

www.worksafely.org

#### **Occupational Health and Safety Contact Centre:**

Telephone: 780-415-8690, toll free by calling 1-866-415-8690

http://www.employment.alberta.ca/SFW/2874.html

#### Certificate of Recognition (COR) Program:

http://www.employment.alberta.ca/SFW/334.html



